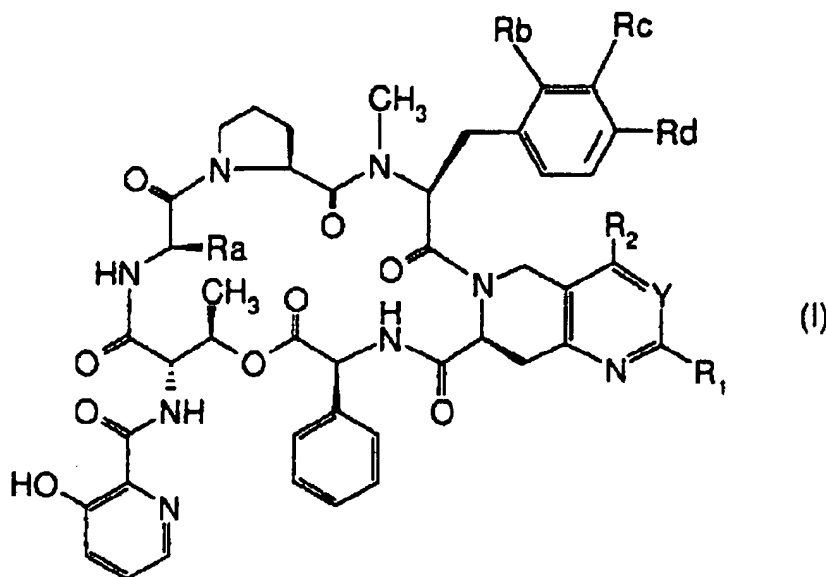


18. A group B streptogramin derivative of formula (I) or a salt thereof:



wherein:

(A) Y is chosen from (i) a nitrogen atom and (ii) $=CR_3-$ groups, and

(1) when Y is chosen from $=CR_3-$ groups, R_1 is chosen from

- (a₁) a hydrogen atom, C₁-C₈ alkyl groups, and C₂-C₈ alkenyl groups,
- (b₁) C₃-C₈ cycloalkyl groups, and saturated and unsaturated C₃-C₈ heterocyclcyl groups,
- (c₁) an unsubstituted phenyl group,
- (d₁) a phenyl group substituted with at least one substituent chosen from halogen atoms, a hydroxyl group, alkyl groups, alkyloxy groups, alkylthio

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groups, alkylsulphinyl groups, alkylsulphonyl groups, an amino group, alkylamino groups, and dialkylamino groups, and

(e₁) groups -NR'R", wherein

- R' and R", which are identical or different, are each chosen from a hydrogen atom, and C₁-C₃ alkyl groups, or

- R' and R", which are identical or different, form, together with the nitrogen atom to which they are attached, a 3- to 8-membered heterocyclyl group, wherein one of said members, in addition to said nitrogen atom, may be an atom chosen from an oxygen atom, a sulphur atom, and a nitrogen atom, and wherein said heterocyclyl group is optionally substituted with a group chosen from alkyl groups, C₂-C₈ alkenyl groups, C₃-C₆ cycloalkyl groups, saturated and unsaturated 4- to 6-membered heterocyclyl groups, a benzyl group, an unsubstituted phenyl group, and a substituted phenyl group, as defined above in (d₁),

(f₁) halomethyl groups, a hydroxymethyl group, and alkyloxymethyl groups,

(g₁) alkylthiomethyl groups, wherein said alkyl portion is optionally substituted with an -NR'R" group, and wherein said R' and said R" are as defined above in (e₁),

(h₁) alkylsulphinylmethyl groups, alkylsulphonylmethyl groups, an acyloxymethyl group, a benzoyloxymethyl group, a cyclopropylaminomethyl group, and -(CH₂)_nNR'R" groups, wherein n is

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chosen from integers ranging from 1 to 4, and wherein said R' and said R'' are as defined above in (e₁), and

- (i₁) when R₃ is a hydrogen atom, R₁ is additionally chosen from a formyl group, a carboxyl group, alkyloxycarbonyl groups, and -CONR'R'' groups, wherein said R' and said R'' are defined as above in (e₁), and

(2) when Y is a nitrogen atom, R₁ is chosen from

- (a₂) options (a₁), (b₁), (c₁), (d₁), and (e₁) as defined above, and
(b₂) -XR^o groups, wherein X is chosen from an oxygen atom, a sulphur atom, a sulphinyl group, a sulphonyl group, and an -NH- group, and wherein R^o is chosen from

- (i) C₁-C₈ alkyl groups, C₃-C₆ cycloalkyl groups,
(ii) saturated and unsaturated 3- to 8-membered heterocyclyl groups,
(iii) 3- to 8-membered heterocyclymethyl groups, wherein said heterocyclyl portion is attached to said methyl group by way of a unit chosen from a carbon atom, an unsubstituted phenyl group, and a substituted phenyl group, as defined above in (d₁),
(iv) -(CH₂)_nNR'R'' groups, wherein said R' and said R'' are defined as above in (e₁) and n is chosen from integers ranging from 2 to 4, and

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(v) when said X is an -NH- group, R° is additionally chosen from a hydrogen atom,

(B) R₂ is chosen from a hydrogen atom and C₁-C₃ alkyl groups,

(C) R₃ is chosen from a hydrogen atom, alkyl groups, a carboxyl group, alkyloxycarbonyl groups, and carbamoyl groups of formula -CO-NR'R'', wherein said R' and said R'' are defined as above in (e₁),

(D) R_a is chosen from a methyl group and an ethyl group, and

(E) R_b, R_c, and R_d are defined as follows:

(1) - R_b and R_c are each a hydrogen atom and

- R_d is chosen from a hydrogen atom, a methylamino group, and a dimethylamino group, or

(2) - R_b is a hydrogen atom,

- R_c is chosen from a hydrogen atom, a chlorine atom, a bromine atom, and C₃-C₅ alkenyl groups, and

- R_d is chosen from -N(CH₃)R''' groups, wherein

- R''' is chosen from

(a) alkyl groups, C₂-C₄ hydroxyalkyl groups, and C₂-C₈ alkenyl groups, wherein said C₂-C₈ alkenyl groups are optionally substituted with a group chosen from

(i) an unsubstituted phenyl group, C₃-C₆ cycloalkyl groups, a methyl group, a benzyl group, and

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- (ii) a benzyl group substituted with at least one substituent as defined with respect to said substituted phenyl groups in (d₁) above,
 - (iii) heterocyclylmethyl groups and heterocycylethyl groups, wherein said heterocyclyl portions of said heterocyclylmethyl groups and said heterocycylethyl groups are chosen from saturated and unsaturated 5- to 6-membered heterocyclyl groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom, and wherein said heterocyclyl groups are optionally substituted with a group chosen from alkyl groups, C₂-C₈ alkenyl groups, C₃-C₆ cycloalkyl groups, saturated and unsaturated 4- to 6-membered heterocyclyl groups, an unsubstituted phenyl group, and a substituted phenyl group as defined above in (d₁),
 - (b) a cyanomethyl group, and
 - (c) -CH₂COR_e groups, wherein R_e is chosen from
 - (i) -OR'_e groups, wherein R'_e is chosen from a hydrogen atom, C₁-C₆ alkyl groups, C₂-C₆ alkenyl groups, a benzyl group, and heterocyclylmethyl groups, wherein said heterocyclyl portion is chosen from 5- to 6- membered heterocycyl

groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom,

- (ii) alkylamino groups, alkylmethylamino groups, heterocyclcyamino groups and heterocyclmethylamino groups, wherein said heterocyclyl portion of said heterocyclcyamino groups and said heterocyclmethylamino groups is chosen from 5- to 6-membered saturated heterocyclyl groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom, and wherein said heterocyclyl groups are optionally substituted with a group chosen from alkyl groups, a benzyl group, and alkyloxycarbonyl groups, or

- (3) - Rb is a hydrogen atom, and
- Rd is chosen from an -NHCH_3 group and an $\text{-N(CH}_3)_2$ group, and Rc is chosen from a chlorine atom, and a bromine atom, and when Rd is an $\text{-N(CH}_3)_2$ group, Rc is chosen from $\text{C}_3\text{-C}_5$ alkenyl groups, or
- (4) - Rb and Rd are each a hydrogen atom and

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- R_c is chosen from halogen atoms, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, C₁-C₆ alkyl groups, and trihalomethyl groups, or

(5) - R_b and R_c are each a hydrogen atom and

- R_d is chosen from halogen atoms, an ethylamino group, a diethylamino group, a methylethylamino group, alkyloxy groups, a trifluoromethoxy group, alkylthio groups, alkylsulphinyl groups, alkylsulphonyl groups, C₁-C₆ alkyl groups, a phenyl group, and trihalomethyl groups, or

(6) - R_b is a hydrogen atom and

- R_c is chosen from halogen atoms, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, and C₁-C₃ alkyl groups, and

- R_d is chosen from halogen atoms, an amino group, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, C₁-C₆ alkyl groups, and trihalomethyl groups, or

(7) - R_c is a hydrogen atom and

- R_b and R_d are each a methyl group, and

- unless otherwise stated, said alkyl groups, said alkenyl groups, and said acyl groups are chosen from, respectively, straight and branched alkyl groups, straight and branched alkenyl groups, and straight and branched acyl groups, and

- unless otherwise stated, said alkyl groups and said acyl groups comprise from 1 to 4 carbon atoms.

19. A group B streptogramin derivative according to claim 18, wherein

(A) Y is chosen from a nitrogen atom and $=CR_3-$ groups, and

(1) when Y is chosen from $=CR_3-$ groups, R_1 is chosen from

(a₁) a hydrogen atom,

(b₁) C_1 - C_8 alkyl groups, C_3 - C_8 cycloalkyl groups, and saturated and unsaturated C_3 - C_8 heterocyclyl groups,

(c₁) an unsubstituted phenyl group,

(d₁) a substituted phenyl group, wherein at least one substituent is chosen from an amino group, alkylamino groups, and dialkylamino groups, and

(e₁) groups $-NR'R''$, wherein

- R' and R'' , which are identical or different, are each chosen from a hydrogen atom, and C_1 - C_3 alkyl groups, or R' and R'' , which are identical or different, form, together with the nitrogen atom to which they are attached, a 3- to 8-membered heterocyclyl group, wherein one of said members, in addition to said nitrogen atom, may be an atom chosen from an oxygen atom, a sulphur atom, and a nitrogen atom, and wherein said heterocyclyl group is optionally substituted with an alkyl group,

(f₁) halomethyl groups, and a hydroxymethyl group,

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- (g₁) alkylthiomethyl groups, wherein said alkyl portion is optionally substituted with an -NR'R" group, and wherein said R' and said R" are as defined above in (e₁),
- (h₁) alkylsulphinylmethyl groups, alkylsulphonylmethyl groups, an acyloxymethyl group, a cyclopropylaminomethyl group, and -(CH₂)_nNR'R" groups, wherein n is chosen from integers ranging from 1 to 4, and wherein said R' and said R" are as defined above in (e₁), and
- (i₁) when R₃ is a hydrogen atom, R₁ is additionally chosen from a formyl group, and -CONR'R" groups, wherein said R' and said R" are defined as above in (e₁), and
- (2) when Y is a nitrogen atom, R₁ is chosen from
- (a₂) options (a₁), (b₁), (c₁), (d₁), and (e₁) as defined above, and
- (b₂) -XR° groups, wherein X is chosen from an oxygen atom, a sulphur atom, a sulphinyl group, a sulphonyl group, and an -NH- group, and wherein R° is chosen from
- (i) C₁-C₈ alkyl groups,
- (ii) 3- to 8-membered heterocyclymethyl groups, wherein said heterocyclyl portion is attached to said methyl group by way of a carbon atom, and

(iii) $-(CH_2)_nNR'R''$ groups, wherein said R' and said R'' are defined as above in (e₁) and n is chosen from integers ranging from 2 to 4,

(B) R_2 is chosen from a hydrogen atom and C_1 - C_3 alkyl groups,

(C) R_3 is chosen from a hydrogen atom, a carboxyl group, and alkyloxycarbonyl groups,

(D) R_a is chosen from a methyl group and an ethyl group, and

(E) R_b , R_c , and R_d are defined as follows:

(1) - R_b and R_c are each a hydrogen atom and

- R_d is chosen from a hydrogen atom, a methylamino group, and a dimethylamino group, or

(3) - R_b is a hydrogen atom, and

- R_d is chosen from an $-NHCH_3$ group and an $-N(CH_3)_2$ group, and

- R_c is chosen from a chlorine atom, and a bromine atom.

20. A group B streptogramin derivative according to claim 18, wherein

(A) Y is chosen from a nitrogen atom and $=CR_3-$ groups, and

(1) when Y is chosen from $=CR_3-$ groups, R_1 is chosen from

(a₁) a hydrogen atom,

(b₁) C_1 - C_3 alkyl groups, C_3 - C_8 cycloalkyl groups, and saturated and unsaturated C_3 - C_8 heterocyclyl groups,

- (c₁) an unsubstituted phenyl group,
- (d₁) a phenyl group substituted with an amino group, and
- (e₁) an acyloxymethyl group,

(2) when Y is a nitrogen atom, R₁ is chosen from

- (a₂) options (a₁), (b₁), (c₁), (d₁), and (e₁), as defined above, and
- (b₂) -XR° groups, wherein X is chosen from an oxygen atom, a sulphur atom, and an -NH- group, and wherein R° is chosen from
 - (i) C₁-C₄ alkyl groups,
 - (ii) -(CH₂)_nNR'R" groups, wherein R' and R", which are identical or different, are each chosen from a hydrogen atom, and C₁-C₃ alkyl groups, or R' and R", which are identical or different, form, together with the nitrogen atom to which they are attached, a 3- to 8-membered heterocyclyl group, wherein one of said members, in addition to said nitrogen atom, may be an atom chosen from an oxygen atom, a sulphur atom, and a nitrogen atom, and wherein said heterocyclyl group is optionally substituted with an alkyl group, and n is chosen from integers ranging from 2 to 4, and

- (B) R₂ is chosen from a hydrogen atom and C₁-C₃ alkyl groups,
- (C) R₃ is chosen from a hydrogen atom, and alkyloxycarbonyl groups,
- (D) Ra is chosen from a methyl group and an ethyl group, and

(E) Rb, Rc, and Rd are defined as follows:

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- (1) - Rb and Rc are each a hydrogen atom and
 - Rd is chosen from a hydrogen atom, a methylamino group, and a dimethylamino group, or
 - (2) - Rb is a hydrogen atom,
 - Rd is chosen from an -NHCH_3 group and an $\text{-N(CH}_3)_2$ group, and
 - Rc is a chlorine atom.

21. A group B streptogramin derivative according to claim 18, wherein said group B streptogramin derivative is 2"-methylpyrido[2,3-5 γ ,5 δ]pristinamycin I_E.

22. A group B streptogramin derivative according to claim 18, wherein said group B streptogramin derivative is 2"-cyclopropylpyrido[2,3-5 γ ,5 δ]pristinamycin I_E.

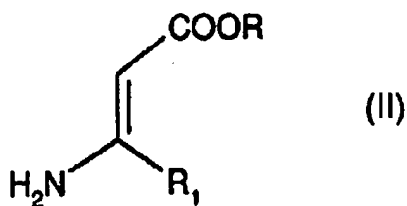
23. A group B streptogramin derivative according to claim 18, wherein said group B streptogramin derivative is pyrido[2,3-5 γ ,5 δ]pristinamycin I_E.

24. A group B streptogramin derivative according to claim 18, wherein said group B streptogramin derivative is 2"-ethylpyrido[2,3-5 γ ,5 δ](4 ζ -methylamino)-(4 ζ -dedimethylamino)pristinamycin I_E.

25. A group B streptogramin derivative according to claim 18, wherein said group B streptogramin derivative is 4ε-chloro-2''-(ethyl)-pyrido[2,3-5γ,5δ](4ζ-methylamino)(4ζ-dedimethylamino)pristinamycin I_E.

26. A process for preparing a group B streptogramin derivative according to claim 18, wherein said Y is chosen from said =CR₃- groups, and said R₃ is not an alkyl group, said process comprising:

(a) reacting an enamino ester of formula (II):

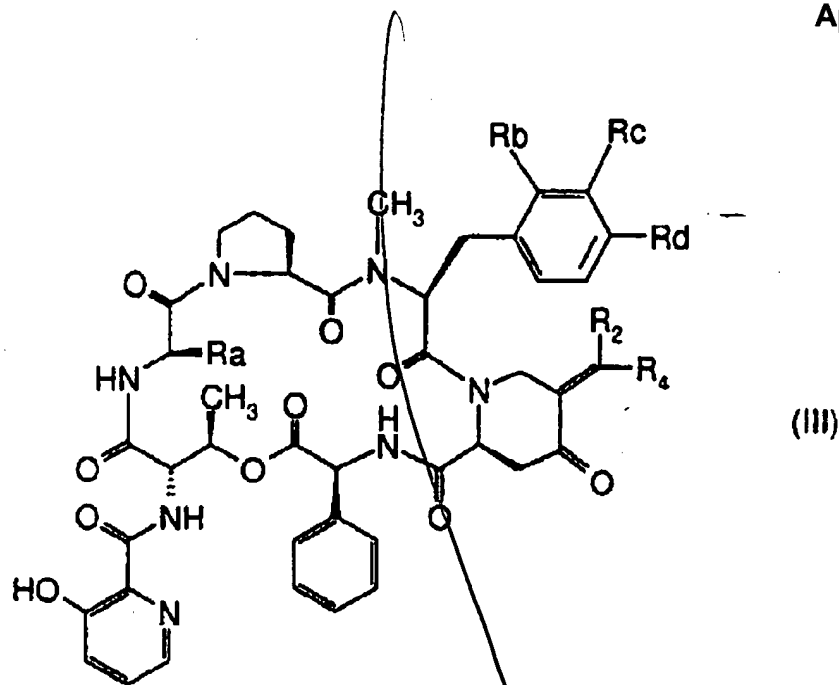


wherein R₁ is chosen from R₁ of formula (I) and R is chosen from alkyl groups and residues of easily hydrolysable esters, wherein said residues are other than said alkyl groups,

with a 5δ-methylenepristinamycin derivative of formula (III):

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wherein

- Ra, Rb, Rc, and Rd are chosen from, respectively, Ra, Rb, Rc, and Rd of formula (I),

(i) - R₂ is chosen from R₂ of formula (I), and

- R₄ is a hydrogen atom, or

(ii) - R₂ is a hydrogen atom, and

- R₄ is chosen from a hydrogen atom and dialkylamino groups,

(b) optionally, where appropriate, converting said group B streptogramin derivative, prepared by (a) above, to a group B streptogramin derivative, wherein said R₃ is a carboxyl group,

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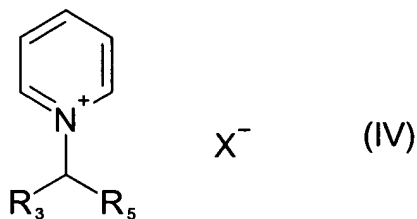
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- (c) optionally decarboxylating said group B streptogramin derivative, prepared by (b) above, wherein said R_3 is a carboxyl group, to a group B streptogramin derivative, wherein said R_3 is a hydrogen atom, or
- (d) optionally converting said group B streptogramin derivative, prepared by (b) above, wherein said R_3 is a carboxyl group, to a group B streptogramin derivative, wherein said R_3 is a carbamoyl group,
- (e) optionally converting said group B streptogramin derivative, prepared by (a) or (c) above, wherein said R_1 is a hydroxymethyl group, to a group B streptogramin derivative, wherein said R_1 is a formyl group, and
- (i) optionally converting said group B streptogramin derivative, wherein said R_1 is a formyl group, to a group B streptogramin derivative, wherein said R_1 is a carboxyl group, and
- (ii) optionally converting said group B streptogramin derivative, wherein said R_1 is a carboxyl group, to a group B streptogramin derivative, wherein said R_1 is chosen from alkyloxycarbonyl groups and $-\text{CONR}'\text{R}''$ groups, and
- (f) optionally mono-N-demethylating said group B streptogramin derivative, prepared by (a), (b), (c), (d), or (e) above, wherein R_d is a dimethylamino group, to a group B streptogramin derivative, wherein R_d is a methylamino group, and

- (g) optionally converting said group B streptogramin derivative, prepared by (a), (b), (c), (d), (e), or (f) above, to a salt.

27. A process for preparing a group B streptogramin derivative according to claim 18, wherein said Y is chosen from $=CR_3-$ groups and said R_3 is chosen from a hydrogen atom and alkyl groups, said process comprising:

- (a) reacting a pyridinium salt of formula (IV):



wherein

X^- is an anion

R_3 is chosen from a hydrogen atom and alkyl groups,

R_5 is chosen from

- (i) residues of ketones of formula R_1-CO- , wherein

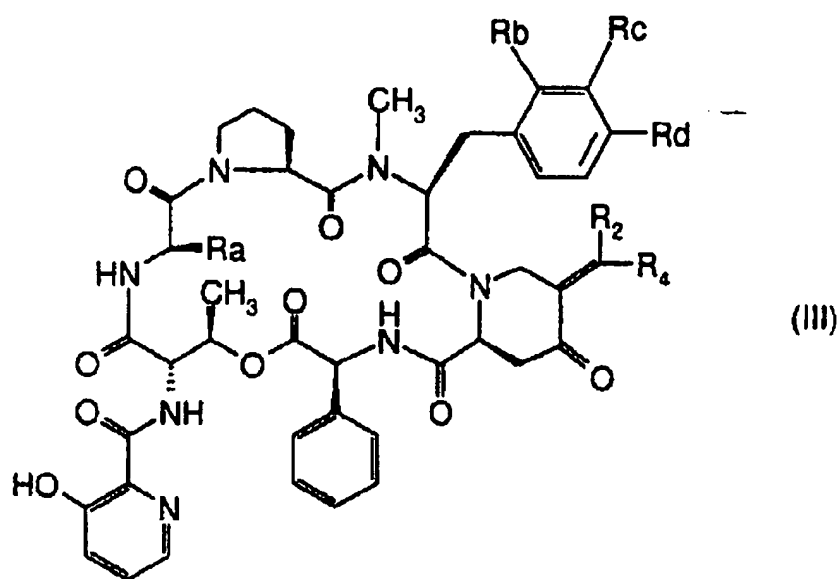
R_1 is chosen from said R_1 of formula (I) except that said

R_1 is not chosen from $-NR'R''$ groups,

- (ii) a protected hydroxyl group,

- (iii) a nitrophenyl group, and

with a 5 δ -methylenepristinamycin derivative of formula (III):



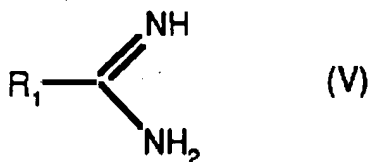
- Ra, Rb, Rc, and Rd are chosen from, respectively, Ra, Rb, Rc, and Rd of formula (I),
- R₄ is a hydrogen atom, and
- R₂ is chosen from R₂ of formula (I), and

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- (b) optionally
- (i) liberating said protected hydroxyl group of said group B streptogramin derivative, prepared by (a) above, or
- (ii) when preparing a group B streptogramin derivative for which said R_1 is an aminophenyl group, reducing said nitrophenyl group of said group B streptogramin derivative, prepared by (a) above, to an aminophenyl group, or
- (c) optionally, to prepare a group B streptogramin derivative for which R_1 is a $-\text{CH}_2\text{NR}'\text{R}''$ group, reacting an amine of formula $\text{HNR}'\text{R}''$, wherein R' and R'' are defined as in formula (I), with a group B streptogramin derivative, prepared by (a) above, wherein R_1 is a halomethyl group,
- (d) optionally converting said group B streptogramin derivative, prepared by (a) above, wherein said R_1 is a hydroxymethyl group, to a group B streptogramin derivative, wherein said R_1 is a formyl group, and
- (i) optionally converting said group B streptogramin derivative, wherein said R_1 is a formyl group, to a group B streptogramin derivative, wherein said R_1 is a carboxyl group, and
- (ii) optionally converting said group B streptogramin derivative, wherein said R_1 is a carboxyl group, to a group B streptogramin derivative, wherein said R_1 is chosen from alkyloxycarbonyl groups and $-\text{CONR}'\text{R}''$ groups, and

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- (e) optionally mono-N-demethylating said group B streptogramin derivative, prepared by (a), (b), (c), or (d) above, wherein Rd is a dimethylamino group, to a group B streptogramin derivative, wherein Rd is a methylamino group, and
- (f) optionally converting said group B streptogramin derivative, prepared by (a), (b), (c), (d) or (e) above, to a salt.

28. A process for preparing a group B streptogramin derivative according to claim 18, wherein said Y is a nitrogen atom, said process comprising:

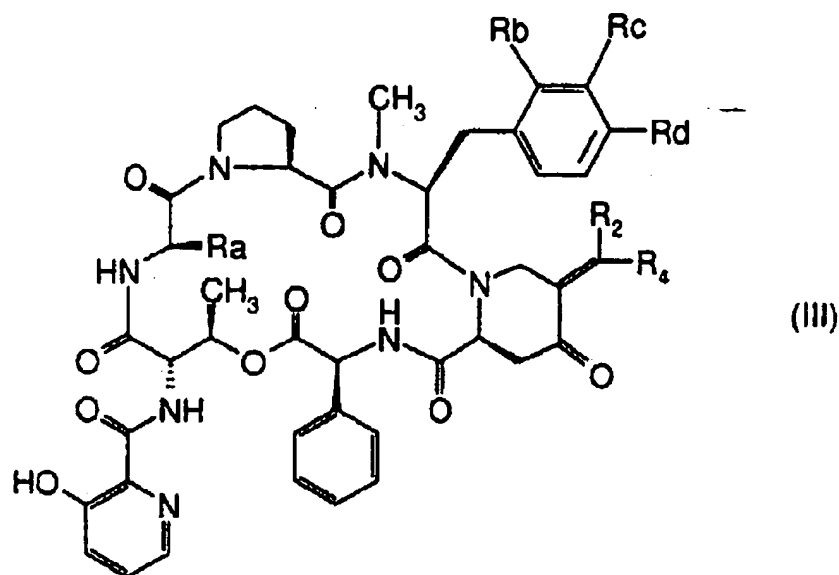
- (a) reacting a compound chosen from amidine salts and compounds of formula (V), wherein said compounds of formula (V) are chosen from derivatives of isourea and derivatives of isothiurea:



wherein said R₁ is chosen from said R₁ of formula (I),

- provided that said R_1 is not chosen from $-XR^\circ$ groups, wherein X is chosen from a sulphonyl group and a sulphinyl group, and
- provided that when said R_1 is chosen from $-NR'R''$ groups, said R_1 is an amino group,

with a 5δ-methylenepristinamycin derivative of formula (III):



wherein

- Ra, Rb, Rc, and Rd are chosen from, respectively, Ra, Rb, Rc, and Rd of formula (I),
- R4 is a dialkylamino group, and
- R2 is chosen from R2 of formula (I),

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- (b) optionally oxidizing said group B streptogramin derivative, prepared by (a) above, wherein X is a sulphur atom, to prepare a group B streptogramin derivative, wherein said R_1 is an $-XR^\circ$ group for which X is chosen from a sulphonyl group and a sulphinyl group,
- (c) optionally reacting said group B streptogramin derivative prepared by (b) above, wherein said R_1 is an $-XR^\circ$ group for which X is a sulphonyl group, with $HNR'R''$, to prepare a group B streptogramin derivative, wherein said R_1 is chosen from $-NR'R''$ groups,
- (d) optionally mono-N-demethylating said group B streptogramin derivative, prepared by (a), (b) or (c) above, wherein R_d is a dimethylamino group, to a group B streptogramin derivative, wherein R_d is a methylamino group, and
- (e) optionally converting said group B streptogramin derivative, prepared by (a), (b), (c), or (d) above, to a salt.

29. A process for preparing a group B streptogramin derivative according to claim 18, wherein said Y chosen from $=CR_3-$ groups, and

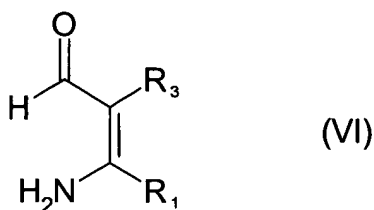
- (1) - R_3 is as defined in formula (I),
- R_1 is chosen from a hydrogen atom, alkyl groups, alkenyl groups, cycloalkyl groups, aromatic heterocyclyl groups, a phenyl group, substituted phenyl groups, halomethyl groups, a hydroxymethyl

group, alkyloxymethyl groups, alkylthiomethyl groups, alkylsulphinylmethyl groups, alkylsulphonylmethyl groups and $-(CH_2)_nNR'R''$ groups, and

- R_2 is a hydrogen atom, or alternatively,
- (2) - when R_3 is a hydrogen atom,
- R_1 is chosen from a formyl group, a carboxyl group, alkyloxycarbonyl groups, and $-CONR'R''$ groups, as defined in formula (I), and
- R_2 is a hydrogen atom,

said process comprising:

- (a) reacting a formyl enamine of formula (VI):



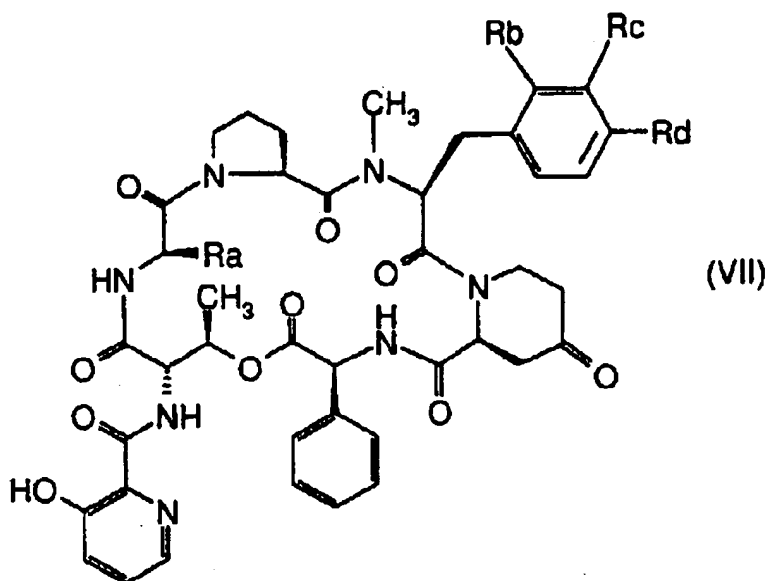
wherein:

- R_1 is chosen from a hydrogen atom, alkyl groups, alkenyl groups, cycloalkyl groups, aromatic heterocyclyl groups, a phenyl group,

substituted phenyl groups, a hydroxymethyl group, alkyloxymethyl groups, alkylthiomethyl groups, and $-(CH_2)_nNR'R''$ groups, and

- R_3 is defined as in formula (I), provided that said R_3 is not a carboxyl group,

with a group B streptogramin derivative of formula (VII):



wherein R_a , R_b , R_c , and R_d are defined as, respectively, R_a , R_b , R_c , and R_d in formula (I),

- (b) optionally converting said group B streptogramin derivative, prepared by (a) above, wherein R_3 is chosen from $-CONR'R''$ groups and alkyloxycarbonyl groups, to a group B streptogramin derivative of formula (I), wherein said R_3 is a carboxyl group,

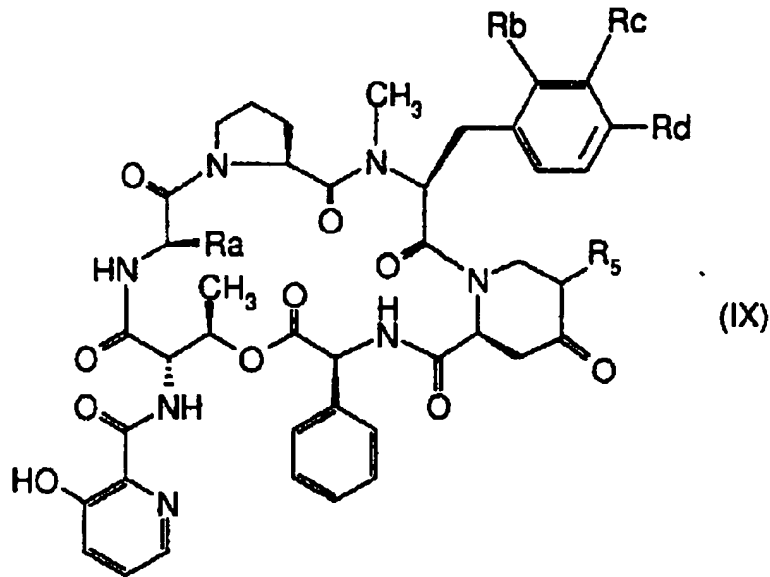
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- (c) optionally oxidizing said group B streptogramin derivative, prepared by (a) or (b) above, wherein said R_1 is chosen from alkylthiomethyl groups, to a group B streptogramin derivative, wherein said R_1 is chosen from alkylsulphinylmethyl groups and alkylsulphonylmethyl groups,
- (d) optionally converting said group B streptogramin derivative, prepared by (a) or (b) above, wherein said R_1 is a hydroxymethyl group,
- (i) to a group B streptogramin derivative, wherein said R_1 is chosen from halomethyl groups, and
- (ii) optionally converting said group B streptogramin derivative, wherein said R_1 is chosen from halomethyl groups, to a group B streptogramin derivative, wherein said R_1 is chosen from $-CH_2NR'R''$ groups, and
- (e) optionally converting said group B streptogramin derivative, prepared by (a) above, wherein said R_1 is a hydroxymethyl group, to a group B streptogramin derivative, wherein said R_1 is a formyl group,
- (i) optionally converting said group B streptogramin derivative, wherein said R_1 is a formyl group, to a group B streptogramin derivative, wherein said R_1 is a carboxyl group, and
- (ii) optionally converting said group B streptogramin derivative, wherein said R_1 is a carboxyl group, to a group B streptogramin derivative, wherein said R_1 is chosen from alkyloxycarbonyl groups and $-CONR'R''$ groups, and

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- (f) optionally mono-N-demethylating said group B streptogramin derivative, prepared by (a), (b), (c), (d), or (e) above, wherein Rd is a dimethylamino group, to a group B streptogramin derivative, wherein Rd is a methylamino group, and
 - (g) optionally converting said group B streptogramin derivative, prepared by (a), (b), (c), (d), (e), or (f) above, to a salt.

30. A process for preparing a group B streptogramin derivative according to claim 18, wherein Rd is a methylamino group, said process comprising:

- (a) mono-N-demethylating a group B streptogramin derivative, wherein Rd is a dimethylamino group, and
- (b) optionally converting said group B streptogramin derivative, prepared by (a) above, to a salt.

31. A streptogramin derivative of formula (IX):



wherein

(A) - Ra is a methyl group and

- Rb, Rc, and Rd are defined as follows:

(1) - Rb and Rc are each a hydrogen atom and

- Rd is chosen from a hydrogen atom, a methylamino group, and a dimethylamino group, or

(2) - Rb is a hydrogen atom,

- Rc is chosen from a hydrogen atom, a chlorine atom, a bromine atom, and C₃-C₅ alkenyl groups, and

- Rd is chosen from -N(CH₃)R''' groups, wherein

- R''' is chosen from

- (a) alkyl groups, C₂-C₄ hydroxyalkyl groups, and C₂-C₈ alkenyl groups, wherein said C₂-C₈ alkenyl groups are optionally substituted with a group chosen from
- (i) an unsubstituted phenyl group, C₃-C₆ cycloalkyl groups, a methyl group, a benzyl group, and
 - (ii) a benzyl group substituted with at least one substituent as defined with respect to said substituted phenyl groups in (d₁) above,
 - (iii) heterocyclymethyl groups and heterocyclylethyl groups, wherein said heterocyclyl portions of said heterocyclymethyl groups and said heterocyclylethyl groups are chosen from saturated and unsaturated 5- to 6-membered heterocyclyl groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom, and wherein said heterocyclyl groups are optionally substituted with a group chosen from alkyl groups, C₂-C₈ alkenyl groups, C₃-C₆ cycloalkyl groups, saturated and unsaturated 4- to 6-membered heterocyclyl groups, an unsubstituted phenyl group, a substituted phenyl group as defined above in (d₁),
- (b) a cyanomethyl group, and
- (c) -CH₂COR_e groups, wherein R_e is chosen from

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- (i) -OR'e groups, wherein R'e is chosen from a hydrogen atom, C₁-C₆ alkyl groups, C₂-C₆ alkenyl groups, a benzyl group, and heterocyclylmethyl groups, wherein said heterocyclyl portion is chosen from 5- to 6- membered heterocycyl groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom,
- (ii) alkylamino groups, alkylmethylamino groups, heterocyclcyamino groups and heterocyclylmethylamino groups, wherein said heterocyclyl portion of said heterocyclcyamino groups and said heterocyclylmethylamino groups is chosen from 5- to 6- membered saturated heterocyclyl groups comprising from 1 to 2 heteroatoms chosen from a sulphur atom, an oxygen atom, and a nitrogen atom, and wherein said heterocyclyl groups are optionally substituted with a group chosen from alkyl groups, a benzyl group, and alkyloxycarbonyl groups, or

- (3) - Rb is a hydrogen atom, and
- Rd is chosen from an -NHCH₃ group and an -N(CH₃)₂ group, and Rc is chosen from a chlorine atom, and a bromine atom, or when Rd is an -N(CH₃)₂ group, Rc is chosen from C₃-C₅ alkenyl groups, or

- (4) - Rb and Rd are each a hydrogen atom and

- R_c is chosen from halogen atoms, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, C₁-C₆ alkyl groups, and trihalomethyl groups, or

- (5) - R_b and R_c are each a hydrogen atom and
- R_d is chosen from halogen atoms, an ethylamino group, a diethylamino group, a methylethylamino group, alkyloxy groups, a trifluoromethoxy group, alkylthio groups, alkylsulphinyl groups, alkylsulphonyl groups, C₁-C₆ alkyl groups, a phenyl group, and trihalomethyl groups, or

- (6) - R_b is a hydrogen atom and
- R_c is chosen from halogen atoms, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, and C₁-C₃ alkyl groups, and
- R_d is chosen from halogen atoms, an amino group, alkylamino groups, dialkylamino groups, alkyloxy groups, a trifluoromethoxy group, thioalkyl groups, C₁-C₆ alkyl groups, and trihalomethyl groups, or

- (7) - R_c is a hydrogen atom and
- R_b and R_d are each a methyl group, or

- (B) - R_a is an ethyl group and
- R_b, R_c and R_d are defined as above in (2) to (7) and

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- R_5 is chosen from disubstituted methylenyl groups of formula:



wherein R_2 and R_4 are defined as above, or

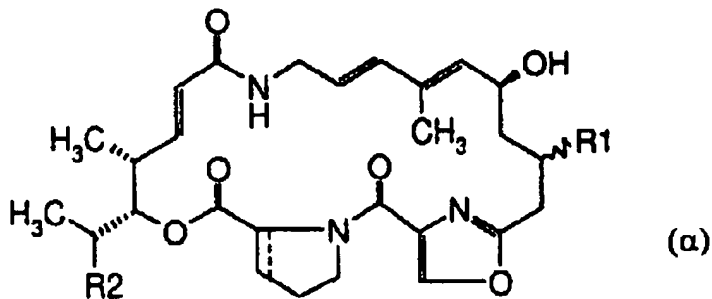
- (C) - R_5 is a hydrogen atom,
- R_a , R_b , R_c , and R_d are defined as above in (2), provided that R''' is not an ethyl group when R_b and R_c are hydrogen atoms.

32. A pharmaceutical composition comprising at least one group B streptogramin derivative or salt thereof according to claim 18, wherein said composition optionally comprises at least one compound chosen from group A streptogramin derivatives and salts thereof, and optionally comprising at least one agent chosen from pharmaceutically acceptable diluents and pharmaceutically acceptable adjuvants.

33. A pharmaceutical composition according to claim 32, wherein said group A streptogramin derivatives are chosen from pristinamycin II_A, pristinamycin II_B, pristinamycin II_C, pristinamycin II_D, pristinamycin II_E, pristinamycin II_F, pristinamycin II_G, semisynthetic group A streptogramin derivatives, and group A streptogramin derivatives of formula (α) and salts thereof:

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wherein R_1 is chosen from $-NR'R''$ groups, wherein

- R' is chosen from a hydrogen atom and a methyl radical,
- R'' is chosen from (i) a hydrogen atom, (ii) alkyl groups, (iii) cycloalkyl groups, (iv) an allyl group, (v) a propargyl group, (vi) a benzyl group, (vii) $-OR'''$ groups, wherein

- R''' is chosen from a hydrogen atom, alkyl groups, cycloalkyl groups, an allyl group, a propargyl group, and a benzyl group,

(viii) $-NR_3R_4$ groups, wherein

- R_3 and R_4 are each a methyl group, or
- R_3 and R_4 , which are identical or different, form together with the nitrogen atom to which they are attached a heterocyclyl group chosen from saturated and unsaturated 4- to 5-membered heterocyclyl groups, wherein one of said

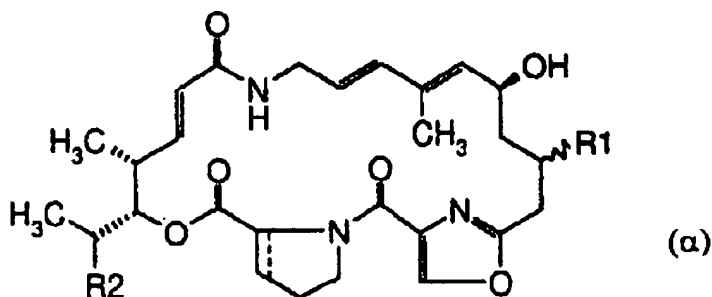
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members, other than said nitrogen atom, is optionally an atom chosen from nitrogen, oxygen, and sulphur,

- R_2 is chosen from a hydrogen atom, a methyl group, and an ethyl group, and
- said bond --- is a single bond or a double bond.

34. A composition comprising at least one group B streptogramin derivative according to claim 18 and at least one group A streptogramin derivative chosen from pristinamycin II_A, pristinamycin II_B, pristinamycin II_C, pristinamycin II_D, pristinamycin II_E, pristinamycin II_F, pristinamycin II_G, semisynthetic group A streptogramin derivatives, and group A streptogramin derivatives of formula (α) and salts thereof:



wherein R_1 is chosen from ---NR'R'' groups, wherein

- R' is chosen from a hydrogen atom and a methyl radical,

- conclude*
- B*
- R" is chosen from (i) a hydrogen atom, (ii) alkyl groups, (iii) cycloalkyl groups, (iv) an allyl group, (v) a propargyl group, (vi) a benzyl group, (vii) -OR''' groups, wherein
 - R''' is chosen from a hydrogen atom, alkyl groups, cycloalkyl groups, an allyl group, a propargyl group, and a benzyl group,
 - (viii) -NR₃R₄ groups, wherein
 - R₃ and R₄ are each a methyl group, or
 - R₃ and R₄, which are identical or different, form together with the nitrogen atom to which they are attached a heterocyclyl group chosen from saturated and unsaturated 4- to 5-membered heterocyclyl groups, wherein one of said members, other than said nitrogen atom, is optionally an atom chosen from nitrogen, oxygen, and sulphur,
 - R₂ is chosen from a hydrogen atom, a methyl group, and an ethyl group, and
 - said bond --- is a single bond or a double bond.